

1922

Salmon canning costs

Rodney D. White

Follow this and additional works at: https://egrove.olemiss.edu/acct_inst

Recommended Citation

White, Rodney D., "Salmon canning costs" (1922). *Publications of Accounting Associations, Societies, and Institutes*. 100.
https://egrove.olemiss.edu/acct_inst/100

This Article is brought to you for free and open access by the Accounting Archive at eGrove. It has been accepted for inclusion in Publications of Accounting Associations, Societies, and Institutes by an authorized administrator of eGrove. For more information, please contact egrove@olemiss.edu.

**NATIONAL ASSOCIATION
of
COST ACCOUNTANTS**

**Affiliated with The Canadian Society
of Cost Accountants**



Official Publications

Vol. III AUGUST 1, 1922 No. 21

Salmon Canning Costs

**BUSH TERMINAL BUILDING
130 WEST 42nd STREET, NEW YORK**

**NATIONAL ASSOCIATION
of
COST ACCOUNTANTS**

**Affiliated with The Canadian Society
of Cost Accountants**



Official Publications

Vol. III AUGUST 1, 1922 No. 21

Salmon Canning Costs

**BUSH TERMINAL BUILDING
130 WEST 42nd STREET, NEW YORK**

NATIONAL ASSOCIATION OF COST ACCOUNTANTS

Affiliated with The Canadian Society of Cost Accountants

Official Publications

Vol. III, No. 21

August 1, 1922

Salmon Canning Costs

RODNEY D. WHITE
Price, Waterhouse & Co.,
Seattle, Wash.

BUSH TERMINAL BUILDING
130 WEST 42nd STREET, NEW YORK CITY

The National Association of Cost Accountants does not stand sponsor for views expressed by the writers of articles issued as Publications. The object of the Official Publications of the Association is to place before the members ideas which it is hoped may prove interesting and suggestive. The articles will cover a wide range of subjects and present many different viewpoints. It is not intended that they shall reflect the particular ideas of any individual or group. Constructive comments on any of the Publications will be welcome.



Additional copies of this Publication may be obtained from the office of the Secretary. The price to members is twenty-five cents per copy and to non-members seventy-five cents per copy.



**COPYRIGHTED BY
NATIONAL ASSOCIATION OF
COST ACCOUNTANTS**

AUGUST 1, 1922

National Association of Cost Accountants

SALMON CANNING COSTS¹

The nature of the salmon packing industry is such that careful consideration must be given to any plan for ascertaining the cost of production. The ordinary accounting principles which have been developed and are commonly applied to other lines of business enterprise under the general heads of unit costs, process costs and specification costs do not wholly fit the plan of accounting procedure which has been considered practical for the salmon packing industry.

Originally the operators in this industry, who were not then so much affected by competition or by the complications which have developed in the administration of the Federal Income and Excess Profits Tax Laws, were not so much concerned with accounting problems, and many viewed rather lightly the desirability of ascertaining costs of production. It was quite common to close the accounts for the operating season or fiscal year after the manner of closing accounts for shipping or trading ventures. By this method the outlay for expenses was very simply applied against the realized or estimated realizable value of the pack, and the resulting balance was recorded as a profit or a loss.

This situation would naturally have been developed by some of the considerations still applying to the industry such as, (1), the speculative hazard of fluctuation in the size of the pack, (2), the wide range of relative selling values of the different grades of product packed, (3), the difficulty of distributing overhead expenses, and (4), the difficulty of acquiring or maintaining competent bookkeepers for operations of a seasonal character. Further reasons of a practical nature also, no doubt, influenced a tendency of some to disregard orderly methods of accounting and were, in part at least, responsible for a common practice of valuing the pack unsold at the end of the year at estimated realizable market prices rather than at cost or market, whichever was lower. If there had been a short pack it was known in advance of closing the books that a loss had been sustained. If there had been a large pack, market conditions may have been such that the profit was realized (by sales of the entire pack actually made before the end of the fiscal year) or believed to have been assured (by reason of contracts effected for sales, or because of confident expectation in a firm market that the whole estimated profit would be shortly realized).

The developments of recent years, particularly the Federal

¹ This article is based upon a paper read before the Washington State Chapter.

tax situation, but also the market conditions of the war period, have clearly demonstrated the advisability of adhering to one of the alternative methods of inventory valuation recognized by the Commissioner of Internal Revenue, namely, cost, or cost or market whichever is lower. Therefore the industry is necessarily interested in a logical plan for the ascertainment of the cost of production.

Whatever arguments may be said for or against an accounting or cost system of greater or lesser scope than the one outlined in this article, it is evident that the main classifications of operating expenses which will be applicable to all operators are as follows: (1) cost of raw fish at the cannery, (2) cost of canning, and (3) transportation to Seattle or other marketing point.

Reference will be made to the essential points to be considered in connection with each of these items.

COST OF RAW FISH AT THE CANNERY

The cost accounting of the raw fish at the cannery may involve some complications, depending upon the methods of operations at various canneries. One cannery may pack only fish caught in fish traps; another may pack only fish caught by seining operations, while a third may pack only fish purchased from independent fishermen; and it is common enough for one cannery to obtain its supply of raw fish from all three of the sources mentioned. No complication arises in the case of fish purchased, since all such purchases would commonly be recorded in a fish purchase book in which would be set down the number and kind of fish purchased and the prices paid. But little complication arises from the recording of fish acquired through seining operations, except that provision must be made for depreciation of equipment belonging to the operator, by fixed rates on equipment of more permanent character and by inventories at the end of each season of equipment of less permanent character. Fish trap operations, however, involve numerous complications arising from the location and accessibility of the traps and the resultant use of floating equipment for the purpose of installing, maintaining and dismantling the fish trap equipment, as well as the transportation of the fish caught from the traps to the cannery.

The common and apparently most practical method of keeping accounts for fish trap operations is to maintain a separate operating account for each trap. Each trap account is to be charged with the cost of new materials and supplies purchased during the year, and the inventory value of such operating supplies and equipment as may have been carried over from the previous operating season. To the first cost or value of materials and supplies should be added a charge for transportation to the trap locations, regardless of how the transportation is accomplished. This charge is for freight paid to others or for the use of floating equipment facilities owned by the operator. Labor for installation and direct or indirect labor of

operation should be charged or apportioned to the operations of each trap. The total cost of operation for the season should be reduced at the end of the season by the salvage value for future operations of the materials and supplies then on hand.

It is important that the number and kind of fish caught at each trap be recorded. Some operators have currently credited the fish trap operating accounts with the market value of the raw fish caught, thereby producing an interdepartmental profit or loss on fish trap operations. This method cannot be objected to from the standpoint that it provides means of systematic record of the production of the various traps, but the interdepartmental profit or loss between fish traps and cannery should, of course, be eliminated in preparing the operating accounts for the season.

While it is suggested that under the general head of Cost of Fish at Cannery there may be several subdivisions, such as—Cost of Fish Purchased, Operation of Fish Traps, Operation of Floating Equipment and Depreciation of Floating Equipment, the combination of the accounts set forth for these subdivisions will give a figure showing the total cost of the fish at the cannery.

While efforts have been made at various times to ascertain the cost of the raw fish according to the weight of the various kinds of fish delivered, it is not believed that this method will be productive of any results of practical value, except in the case of those operators who purchase all raw fish packed. It is questionable if a feasible plan for segregating the cost of trap fish or seine fish by kinds of fish, according to the assumed relative values of the different kinds, could be worked out. However, such a method of apportionment may be justified as an expedient for the whole cost of salmon canning operations, as will be brought out later. To take the trap or seine fish into account at assumed market prices, disregarding the numerous conditions which may affect the assumed market prices used, would be but to create an arbitrary basis for the value of the fish at the cannery which could not be represented as cost for the reason that a fictitious profit or loss on trap or seining operations would necessarily have been recorded.

Therefore it is suggested that at this point the total cost of fish at the cannery be divided by the total number of cases packed and that only the average rate per case of fish packed be extended.

COST OF CANNING

The required operating accounts for the cost of canning vary according to the size of the plant or peculiarities of local operating conditions but will in substance include a classification similar to the following general outline:

Cannery labor
Contract labor

To be charged with advances under guaranteed pack arrangements and final settlements at the end of the season. To be closed into the Cannery Labor Account at the end of the season.

Contract labor expense

To be closed into the Contract Labor Account at the end of the season.

Cans To be charged with the purchases of tin plate, can ends, pig tin, pig lead, acid, etc., entering into the manufacture of cans, and labor, or the cost of cans purchased.

Boxes Including box shooks, nails, labor, etc.

Labels and lacquer

Fuel

Miscellaneous operating supplies
For operating supplies not provided for in other operating accounts.

Miscellaneous operating expenses
For operating expenses not provided for in other operating accounts.

Repairs docks and buildings

Repairs machinery and equipment
Only ordinary repairs and renewals to be charged to these accounts, extraordinary repairs, renewals and replacements to be charged to Depreciation Reserve Accounts.

Depreciation docks and buildings

Depreciation machinery and equipment
Annual provision based upon cost of construction of buildings and docks and on cost of machinery and equipment installed.

Insurance

Taxes

Superintendence

Proportion of management salaries (and head office overhead)
May be distributed to canneries currently upon the basis of contract labor guarantees or at the end of the operating season upon the basis of the number of cases packed.

The combination of the operating expenses outlined in the foregoing (with which will have been included steamship freight and steamship fares, segregated as applicable) will give the total cost of cannery operations, which it is suggested should be divided at this point by the total number of cases packed, and that only the average rate per case be extended.

TRANSPORTATION TO SEATTLE OR OTHER MARKETING POINT

The transportation of the cases of canned salmon to Seattle or other marketing point may be effected by various means such as contracts with steamship companies for space or cargoes, or by the use of floating equipment belonging to the operator. In ordinary circumstances it will not be practicable to effect a segregation of the freight or transportation cost for cases of half-pound cans and one-pound cans owing to the wide range in selling values of the different kinds of product. It is doubtful if a reasonable segregation of the cost by grades and sizes could readily be made other than by the method of valuing the inventories of canned salmon to which reference will next be made. Therefore it is suggested that at this point the total cost of transportation to Seattle or other marketing point be divided by the total number of cases shipped, and that only the average rate per case be extended.

VALUATION OF INVENTORIES

The average cost per case for all salmon packed during the operating season will have been ascertained by the methods already outlined. Consideration is now to be given to the adoption of a method of valuation for inventories in which recognition will be made of the widely fluctuating values of the different kinds of fish packed and of the impracticability of arriving at what might be called the true unit or processing cost of packing the different grades.

The method used by many of the larger operators in the industry may be outlined as follows:

1. List the number of cases of the different kinds and sizes of canned salmon packed.
2. Multiply the quantities by the estimated selling values per case based upon the "opening" market prices.
3. Calculate the percentages of value of each kind and size at "opening" prices to the total value of the pack at "opening" prices.
4. Multiply the total cost of the pack by the respective percentages for each kind and size of the total value of the pack at "opening" prices.
5. Divide the apportioned cost per kind and size by the number of cases of each kind and size, thereby arriving at an apportioned cost per case for each kind and size.

This method was first suggested and then adopted after consideration had been given to the following points:

1. The uncertainty of the "run" of fish, both as to quantities and kinds, often producing, by chance, a low cost of operation for the more valuable kinds of fish or a high cost of operation for the less valuable kinds of fish. With this condition is closely related the impracticability of measuring the efficiency of management with an indeterminable volume of production.
2. The impracticability of apportioning the cost of trap fish by kinds for, while the operating cost may in a measure be controlled, the kind or value of the "catch" is not assured, and, when ascertained, is ordinarily not dependent upon any more or less effort or expense than would have been required for a "catch" of greater or less value.
3. The fluctuating character of the expense for cannery labor which is commonly arranged for under contracts guaranteeing a fixed compensation for an estimated pack, with provisions for increases, but with no provision for decreases, should less than the estimated pack be obtained.
4. The shortness of the operating season, during which all operations are conducted under great pressure; it is very doubtful that operators would approve of the distraction from operations and of the expense of applying the more common cost finding methods when it is frequently quite probable that no result of essential value would be reached.

The general principles of apportioned costs are not peculiar to the salmon packing business. They might with good results be even more generally applied. As usage governs the choice of words so may custom be the authority for accounting practices and terminology. It is not suggested that precedent may alone be cited as a reason for actions taken but if it be demonstrated that on the whole a particular method of procedure is not only sound in principle but is also the more convenient for practical application it is apparent that such a method should be generally adopted.

ACCOUNTS

The plan outlined provides that the cannery operating accounts are to be made up at the end of the fishing season. The accounts may be completed by those permanent members of the accounting staff at the head office of the operator or by public accountants. Having regard for the seasonal character of the operations, it has been considered essential that the cannery bookkeepers be provided with simple accounting records, among which a columnar distribu-

tion journal is an important feature, and that the accounting instructions should be set forth in a clear and concise manner. The cannery operating books should deal only with the operating accounts and inventories and local accounts receivable and payable pertaining thereto. General purchases are ordinarily made through the head office and charged to the cannery through a current account. The plant, property and capital accounts, surplus, reserves, etc., should be kept on the head office books.

Interest paid has not been heretofore mentioned for the reason that many of the leading accounting authorities are of the opinion that interest paid on borrowed money is equivalent to a sharing of net profits with others than stockholders and that it does not properly constitute an addition to the cost of production.

The standardization of accounting and costing methods for the salmon packing industry may well be a matter for serious consideration by the trade association for the industry. There is no question about the great benefit to the industry which would have been derived if such standardization had become effective before the complications of Federal Excess Profits Tax Laws and Federal investigation and regulation of trade conditions had arisen. There is also no question of the importance of a standardization of methods under the existing Federal Income Tax Law which provides for the carrying forward of net losses to be applied against future net profits.

Vol. I

No. 5—Industrial Accounting as an Aid to Management, *Homer N. Sweet*

No. 7—Accounting for By-Products, *Research Dept. N. A. C. A.*

Vol. II

No. 6—A Method of Obtaining Ink Costs in the Printing Industry, *Paul H. Shaw* (out of print)

No. 7—Purchase Orders and Purchase Records, *Homer N. Sweet*

No. 8—Some Problems in the Actual Installation of Cost Systems, *H. G. Crockett* (out of print)

No. 9—Cost Accounting for Public Utilities, *E. D. Bistline*

No. 10—A Bibliography of Cost Books, *Research Dept. N. A. C. A.*

No. 11—Cattle Costs, *E. D. Newman* (out of print)

No. 12—Coöperation and Cost Control, *John W. Robinson* (out of print)

No. 13—A Method of Accounting for Scrap, *C. B. Williams* (out of print)

No. 14—Cost Accounting for Fruit and Vegetable Canners, *Frank Palmer Brown* (out of print)

No. 15—What is Wrong with Cost Accounting? *G. Charter Harrison*

No. 16—A Method of Distributing Factory Payroll, *Matthew Porosky*

No. 17—Coal Production Costs, *R. W. Gardiner*

No. 18—Uniform Cost Accounting Methods in the Printing Industry, *W. B. Lawrence*

No. 19.—A Cost System for an Electric Cable Plant, *Fred F. Benke*

Vol. III

No. 1—Cost Methods in a Woodworking Plant, *J. J. McCaffrey* (out of print)

No. 2—Costs as an Aid to Management, *John M. Scanlon*

No. 3—Cost Accounting in the Laundry Industry, *Fred Elliott*

No. 4—Some Cost Problems in the Hawaiian Sugar Industry, *F. A. Haenisch*

No. 5—Securing Effective Work from Labor, *J. L. McVicker*

No. 6—Some Phases of Cost Accounting in the Chemical Industry, *C. B. E. Rosén*

No. 7—Cost Accounting in the Soap Industry, *William C. Koch*

No. 8—Relation to Budgetary Control to Cost Accounting, *J. O. McKinsey* (out of print)

No. 9—Methods of Accounting for Waste in a Cotton Spinning Mill, *George D. Klimmer*

No. 10.—List of References on Interest as an Element of Cost

No. 11—The Scrap Problem, *I. W. Kokins*

No. 12.—Logging Costs, *Horace J. Nelson* (out of print)

No. 13.—A Premium Incentive Wage Plan, *J. H. Paterson* (out of print)

No. 14.—Cost Methods in the Packing Industry, *J. H. Bliss*

No. 15.—Flour Milling Costs, *C. A. H. Narhan*

No. 16.—Distribution of Operating Costs of Centralized Power Plants at Low Capacity, *Frank B. Wolfe*

No. 17.—Cost Accounting in the Canning Industry, *E. J. Coleman*

No. 18.—Cost Accounting in the Oil Refining Industry, *U. Robert and J. J. Mulhern*.

No. 19.—Normal Burden Rates, *Charles Van Zandt*

No. 20.—Chocolate and Cocoa Costs, *George Rea*

No. 21.—Salmon Canning Costs, *Rodney D. White*

Copies of the above Publications which are not out of print may be obtained from the office of the Secretary of the Association, 130 W. 42nd Street, New York City, at the price of 75 cents per copy.